0000001

SITE ASSESSMENT REPORT
FOR
FORMER ELECTROFINISHERS
CHICAGO, COOK COUNTY, ILLINOIS
TDD: 05-0006-017
PAN: 0N1701SIXX

October 25, 2000

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: _____ Date: 10/25/00
Larry Lueck, START Project Manager

Reviewed by: _____ Date: 10/25/00
Patrick Zwilling, START Assistant Program Manager

Approved by: _____ Date: 10/25/00
Daniel Sewall, START Program Manager

ecology and environment, inc.
International Specialists in the Environment
33 North Dearborn Street, Chicago, Illinois 60602
Tel. 312/578-9243, Fax: 312/578-9345

Table of Contents

Section		Page
1	Introduction	1-1
2	Site Background	2-1
	2.1 Site Description	2-1
	2.2 Site History	2-1
3	Site Assessment	3-1
	3.1 Site Observations	3-1
	3.2 Sampling Activities	3-2
4	Analytical Results	4-1
5	Discussion of Potential Threats	5-1

Appendix		Page
A	Photodocumentation	A-1
B	Validated Laboratory Reports and Analytical Data Memoranda	B-1

List of Illustrations

Figure		Page
2-1	Site Location Map	2-2
2-2	Site Features Map	2-3
3-1	Sample Location Map	3-3

List of Tables

Table		Page
3-1	Soil and Solid Samples Collected	3-4
4-1	Analytical Data	4-2

1. Introduction

The United States Environmental Protection Agency (U.S. EPA) tasked the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E), under Technical Direction Document (TDD) S05-0006-017, to assist On-Scene Coordinator (OSC) Reinero Rivera with a site assessment at the Former ElectroFinishers (EF) site in Chicago, Cook County, Illinois. START prepared and implemented a health and safety plan; conducted a site reconnaissance; subcontracted analytical services; documented on-site activities; collected four soil samples and four concrete and mortar samples at specified on-site locations for laboratory analysis; and evaluated potential threats to human health and the environment. The site assessment activities were conducted on August 10, 2000 under the direction of OSC Rivera.

2. Site Background

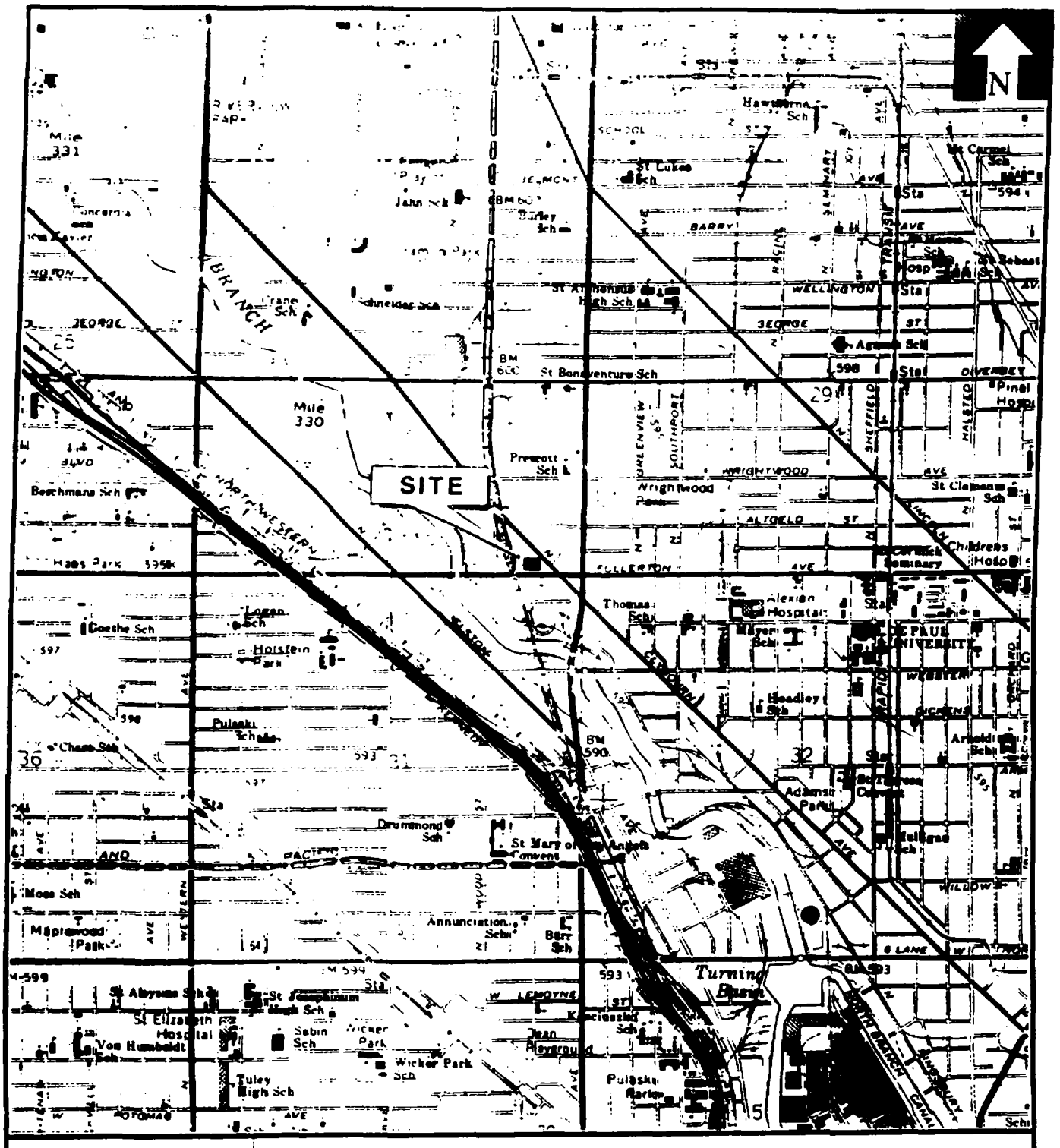
2.1 Site Description

The address of the FE site is 1662 West Fullerton Avenue, Chicago, Illinois. Site coordinates, as measured by START on the U.S. Geological Survey 7.5-minute Chicago Loop Quadrangle map, are latitude 41°55'33.6" north by longitude 87°40'16.3" west (Figure 2-1). The site is bounded on the north by intersecting private alleys, on the east by commercial property, on the south by Fullerton Avenue, and on the west by residential property. The neighborhood is mixed residential and commercial. There is a hospital approximately 3,000 feet to the east and numerous schools within a 1-mile radius of the site. The nearest surface water body is the North Branch of the Chicago River, which lies 1,000 feet west of the site, while Lake Michigan is approximately 2 miles due east.

The FE site comprises four brick buildings and two small fenced yards. For purposes of this report, the buildings are designated A through D from west to east (Figure 2-2). Buildings A, B, and C adjoin, sharing interior walls. Building D is a separate structure at the east end of the site. The four buildings are in an east-west row facing south onto Fullerton Avenue. A sidewalk approximately 9 feet wide separates the site buildings from the street. The [redacted] residence, at 1704 West Fullerton, is separated from Building A by a gated, paved passageway that is approximately 3 feet wide (Appendix A, Photodocumentation).

2.2 Site History

On March 9, 2000, Pat Guzowski of the Metropolitan Water Reclamation District (MWRD) and Mark Retzlaff of the Illinois Environmental Protection Agency (Illinois EPA) responded to a complaint by John [redacted] of 1704 West Fullerton concerning green and yellow crystalline material that had been forming in his basement and sump. Analytical results of sampling performed during this response indicated the presence of toxicity characteristic leaching procedure (TCLP) chromium at 302.24 milligrams per liter (mg/L) in the [redacted] basement. In a subsequent complaint to the Chicago Department of Environment (CDE), Mr. [redacted] indicated that he believed the chromium to be



Quadrangle Location

Illinois

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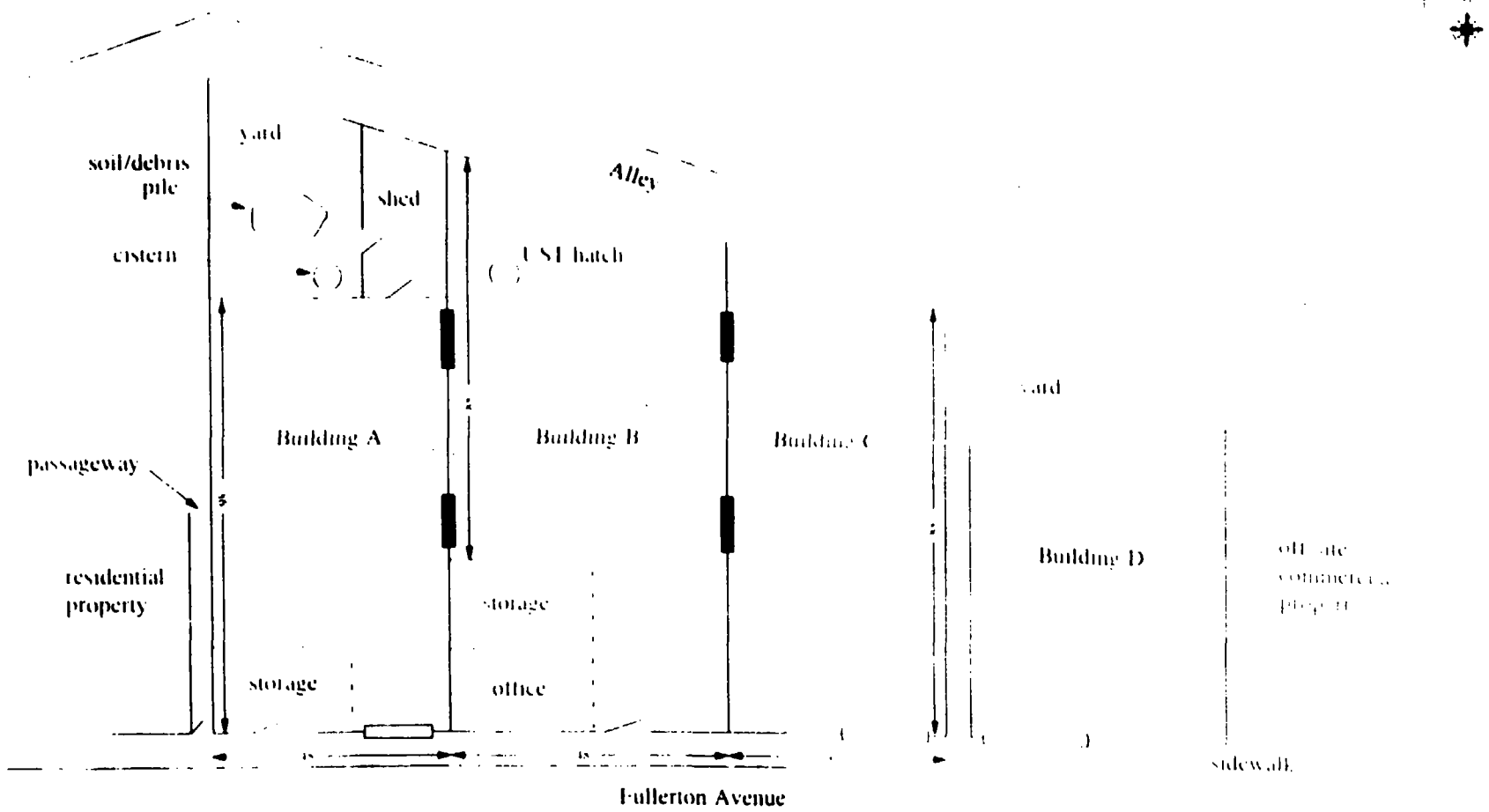
Region 5 - Superfund Technical Assessment and Response Team

33 North Dearborn Street, Chicago, Illinois 60602

TITLE: Site Location Map	FIGURE: 1
SITE: Former Electrofinishers	SCALE: 1:24,000
CITY: Chicago STATE: Illinois	TDD: S05-0006-017
SOURCE: USGS 7.5 Minute Series, Chicago Loop, Illinois Quadrangle	DATE: 1963 REVISED: 1972



Legend

- Exterior or bearing wall
- Interior partition
- Overhead door
- Sliding steel door
- Fence
- 48' Length of wall

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TITLE: Site Features Map	FIGURE: 2-2
SITE: Former Electrofinishers	SCALE: Not to Scale
CITY: Chicago STATE: Illinois	TDD: S05-0006-017
SOURCE: Ecology and Environment, Inc.	DATE: September 2000

[illegible] He [illegible] stated [illegible] Inc. had operated a chromium plating [illegible] West [illegible] approximately [illegible] years but that they ceased operations in [illegible]

On May 5, 2000, in response to the [redacted] complaint, Pete Badillo of CDE and Pat Guzowski of MWDR inspected the former plating facility, during which it was determined that the present owner is a Mr. Jim Petrozzini of Lincoln Park Property Management (LPPM). LPPM alleged that a proper cleanup of the plating facility had been performed, but an LPPM employee told CDE and MWRD that several vats or tanks had been left in the ground and concreted over. During the inspection, CDE collected a grab sample of a "yellowish powder-like substance" from the floor and walls which appeared to be "decaying or deteriorating the brick and concrete." The inv[illegible]tors also noted yellow staining on the sidewalk in front of the site. Analytical results from the grab sample indicated a chromium level of 17,200 milligrams per kilogram (mg/kg) total chromium.

On June 19, 2000, the site was referred to U.S. EPA by Pam Thomas of CDE, and CDE and Illinois EPA agreed to gather additional background information on the site, including a title search.

3. Site Assessment

3.1 Site Observations

On July 7, 2000, START members Bill Sass and Sally Rhine met OSC Rivera on site with a completed health and safety plan and equipment for soil and groundwater sampling, expecting to perform a site assessment. However, access was denied and the assessment postponed.

On August 10, 2000, START members Tim Calloway and Larry Lueck met OSC Rivera and Mr. Dan Smith of CDE to perform the assessment. It was noted from the sidewalk that much of the front of Building A was stained black up to 3 or 4 feet above the pavement, and that the mortar in the stained area of brick was bright yellow. The group was admitted through the office street door, located at the front (south) of Building B, by a woman who did not introduce herself but who was presumed to be an LPPM employee. She said that, although Mr. Petrozzini had been out of town and had therefore not signed the access agreement, the site assessment could proceed. The site assessment began with a site walk-through. Clayton Koher of the federal Agency for Toxic Substances and Disease Registry (ATSDR) joined the walk-though briefly, observing the main areas of visible site contamination.

Salient site features are as shown in Figure 2-2. Behind (north of) the facility office in Building B there is a restroom and a caged storage area. The rest of Building B and all of Building C were found to be largely vacant, in good condition, and not obviously contaminated. Sliding steel doors set in north-south interior walls provide access between Buildings A, B, and C. Buildings A and C also have overhead receiving doors on the Fullerton Avenue side in addition to personnel doors.

Proceeding through a connecting steel door in the west wall of Building B, the group found Building A to be occupied by as many as 10 or 12 older passenger vehicles in various stages of disrepair, as well as engines, auto parts, tools, and a great deal of other equipment. The interior brick walls are painted light gray and the floor is smooth concrete. However, a yellow crusty material is seen to be bleeding through and overwhelming the wall paint in several locations. This yellow crust is finely crystalline, at least in part, crumbles easily at the touch, and forms grainy deposits on the floor below. At one location in the southwest quarter of the building, a patch of floor surface is shattered, revealing it to be a thin veneer covering loose, powdery to sandy yellow material (Appendix A, Photodocumentation).

A door near the east end of the Building A north wall leads into an attached storage shed, and another door from the shed gives onto a fenced, mostly unvegetated yard. In the center of the yard there is a circular pile of mixed soil, ash, and small debris approximately [illegible] feet high by 30 feet across. Near the southeast corner of the yard there is a round, concrete-rimmed cistern or catchment basin that appears to be plugged with wet mud less than 2 feet below grade. The north exterior brick wall of Building A is stained yellow and black (Appendix A, Photodocumentation).

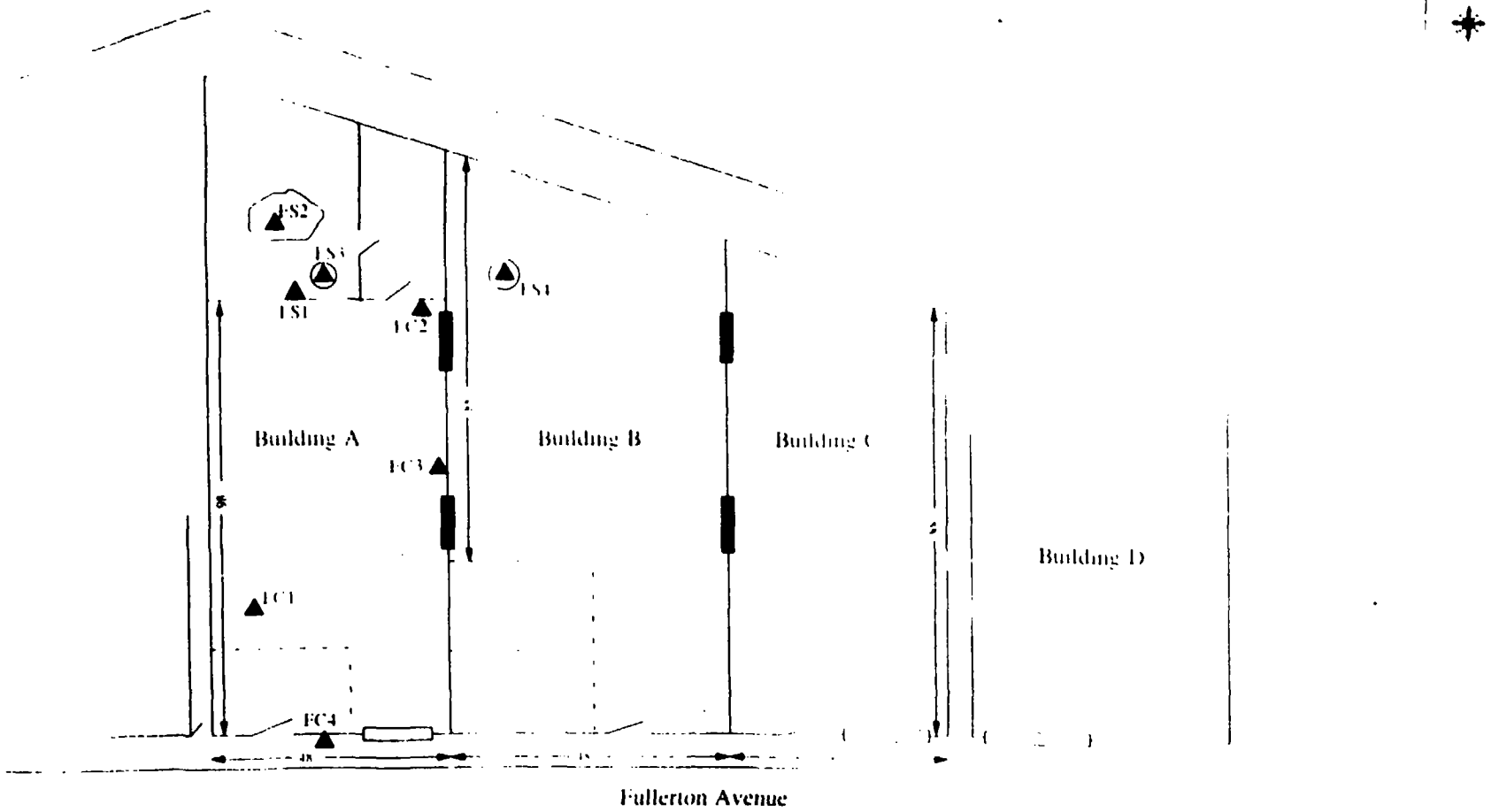
No yellow staining or crust was seen in Building B, which is virtually empty north of the caged storage area. Near the northwest corner of the building, there is a circular steel hatch in the floor covering what appears to be a capped 3-inch underground storage tank (UST) filler pipe.

Building C is empty and no staining or crust was observed. A locked personnel door near the north end of the east wall opens onto a small vegetated yard that includes a narrow unpaved passage between Buildings C and D. Numerous car doors and other auto parts are stored in the yard and in Building D, which also houses a small boat. Building D has both an overhead receiving door and a personnel door on Fullerton Avenue. No signs of contamination were noted in or around Building D.

3.2 Sampling Activities

At 1000 hours, START brought supplies and tools into the site property and began collecting samples at locations agreed upon with the OSC (Figure 3-1). Sampling activities were performed in modified level D protection, i.e. steel-toed work boots, disposable outer booties, disposable nitrile gloves, and safety glasses. Information about the samples collected is set out in Table 3-1 and there is a photograph of each sample location in Appendix A. Soil samples FS1, FS2, and FS3 were grab samples collected from a depth of a few inches with a stainless steel trowel and homogenized in a stainless steel bowl. The trowel and bowl were decontaminated between samples with Alconox solution and distilled water rinse. Subsequent samples were dry, so the tools were decontaminated with paper towels. Samples of crusty yellow material inside Building A were collected with trowels, as was a sample of soil from inside the UST hatch. To collect a sample of the yellow mortar from the front of Building A, START spread newspaper on the sidewalk below the wall, then used hammers and chisels to remove loose mortar, most of which fell out easily from between the bricks, being in a deteriorated condition.

It had been planned to sample water from the basement sump at the 1704 Fullerton residence and analyze it for total chromium and hexavalent chromium, but Mr. [redacted] was not available to



Legend

FC1 ▲ Sample location

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TITLE	Sample Location Map	FIGURE	3-1
SITE	Former Electrofinishers	SCALE	Not to Scale
CITY	Chicago	STATE Illinois	TDD S05-0006-017
SOURCE	Ecology and Environment, Inc.	DATE	September 2000

Table 3-1

SOIL AND SOLID SAMPLES COLLECTED
FORMER ELECTROFINISHERS
CHICAGO, COOK COUNTY, ILLINOIS
August 10, 2000

Sample Number	Time of Collection	Matrix	Location
FS-1	1005	soil debris	In northwest yard 8 inches north of Building A north wall
FS-2	1010	soil	Soil debris pile in northwest yard
FS-3	1010	soil sediment	Catch basin in northwest yard
FS-4	1100	soil dirt	Top of probable UST under hatch in Building B floor, northwest corner.
FC-1	1030	crumbled yellow cement	Section of shattered floor in southwest quarter of Building A
FC-2	1040	mortar yellow crust	Doorway from Building A to shed.
FC-3	1045	mortar yellow crust	Base of east interior wall, Building A.
FC-4	1145	yellow mortar	South-facing exterior brick wall, Building A at Fullerton sidewalk.

[illegible] access to his building.

START labeled each sample with a unique sample number and the date and time of collection, then packed them in a cooler with a completed chain-of-custody form. On August 10, 2000, the cooler was shipped via Federal Express to CT&E Environmental Services, Inc., in Lexington, Michigan. Under analytical TDD S05-0006-805, each sample was analyzed for total Resource Conservation and Recovery Act (RCRA) metals, hexavalent chromium, and total and reactive cyanide with a rapid turnaround time.

4. Analytical Results

The analytical results of the samples collected during the FE site assessment are presented in Table 4-1. The validated laboratory reports and QA QC memoranda are presented in Appendix B. All eight of the samples were found to contain elevated levels of total chromium, from 4,800 mg/kg to 52,000 mg/kg. Five samples contained elevated levels of hexavalent chromium, from 2,200 mg/kg to 37,000 mg/kg. Four samples contained total lead greater than 1,000 mg/kg. Other RCRA metals and cyanide were present at acceptable levels.

At the OSC's request, START contacted the laboratory and asked them to perform TCLP analysis on seven of the samples for chromium and on three for lead. Results of the TCLP analyses are also given in Table 4-1. The regulatory level for TCLP chromium and lead is 5.0 mg/L. Elevated concentrations of chromium were detected in all of the yellow mortar and crust samples, from 180 mg/L to 2,000 mg/L, as did soil sample FS-4, at 120 mg/L. None of the samples analyzed contained TCLP lead above the limit.

Table 4-1

ANALYTICAL DATA
FORMER ELECTROFINISHERS
CHICAGO, COOK COUNTY, ILLINOIS

Sample Number	Parameter (mg/kg for Totals, mg/L for TCLP)												
	As	Ba	Cd	Cr	TCLP Cr	Cr^{VI}	Pb	TCLP Pb	Hg	Se	Ag	CN	Reactive CN
ES-1	24	190	7.9	6,700	NA	17	1,400	NA	[illegible]	[illegible]	74	[illegible]	
ES-2	6.2	310	3.8	5,500	0.26	4.6	3,700	1.1	[illegible]	1.5	6.9	[illegible]	[illegible]
ES-3	11	260	6.4	13,000	1.2	0.85	1,100	0.49	0.4	1.4	29	1.1	[illegible]
ES-4	12	500	38	29,000	120	2,700	4,900	ND	[illegible]	ND	ND	[illegible]	[illegible]
EC-1	ND	190	ND	52,000	2,000	37,000	360	NA	[illegible]	ND	ND	[illegible]	
EC-2	1.8	38	2.6	7,100	260	4,700	130	NA	0.074	1.9	11	2.3	ND
EC-3	7.0	50	0.33	4,800	180	2,900	40	0.067	0.051	1.2	ND	0.48	ND
EC-4	ND	33	ND	31,000	1,600	17,000	84	NA	0.025	ND	ND	1.3	ND

Key:
NA - Not analyzed
ND - Not detected
CN - Cyanide
mg/kg - Milligrams per kilogram
mg/L - Milligrams per liter

Source: CT&E Environmental Services, Inc., Ludington, Michigan, analytical TDD #S05-0006-805

5. Discussion of Potential Threats

Conditions present at the FE site that warrant an appropriate removal action as set forth in paragraph (b) (2) of Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) are:

- **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants:** Analyses of soil samples from the northwest site yard indicate that anyone present in the yard could be exposed through direct contact, ingestion, or inhalation to elevated levels of total chromium and lead. Analyses of samples of deteriorated mortar and concrete and of yellow crust inside Building A indicate that anyone working or otherwise present there could be directly exposed to unacceptable levels of total chromium and hexavalent chromium through direct contact, ingestion, or inhalation. Levels of 31,000 mg/kg total chromium and 17,000 mg/kg hexavalent chromium detected in mortar on the south-facing brick front of Building A are particularly threatening. Loose yellow mortar is found there from ground level up to a height of 3 to 4 feet where it could be eye-catching and attractive to small children passing by. Numerous residences, schools, and businesses are located in the neighborhood. Therefore, a fair amount of pedestrian traffic, including children, can be expected. Hexavalent chromium produces a number of toxic symptoms, including skin rashes and ulcers upon direct contact; runny nose, sneezing, itching, nosebleeds, and nose ulcers upon inhalation; and stomach upsets and ulcers, kidney and liver damage, and even death upon ingestion. Any of these effects can be compounded by allergy to chromium. Chromium is also a known carcinogen, sometimes leading to lung cancer from chromic exposure.

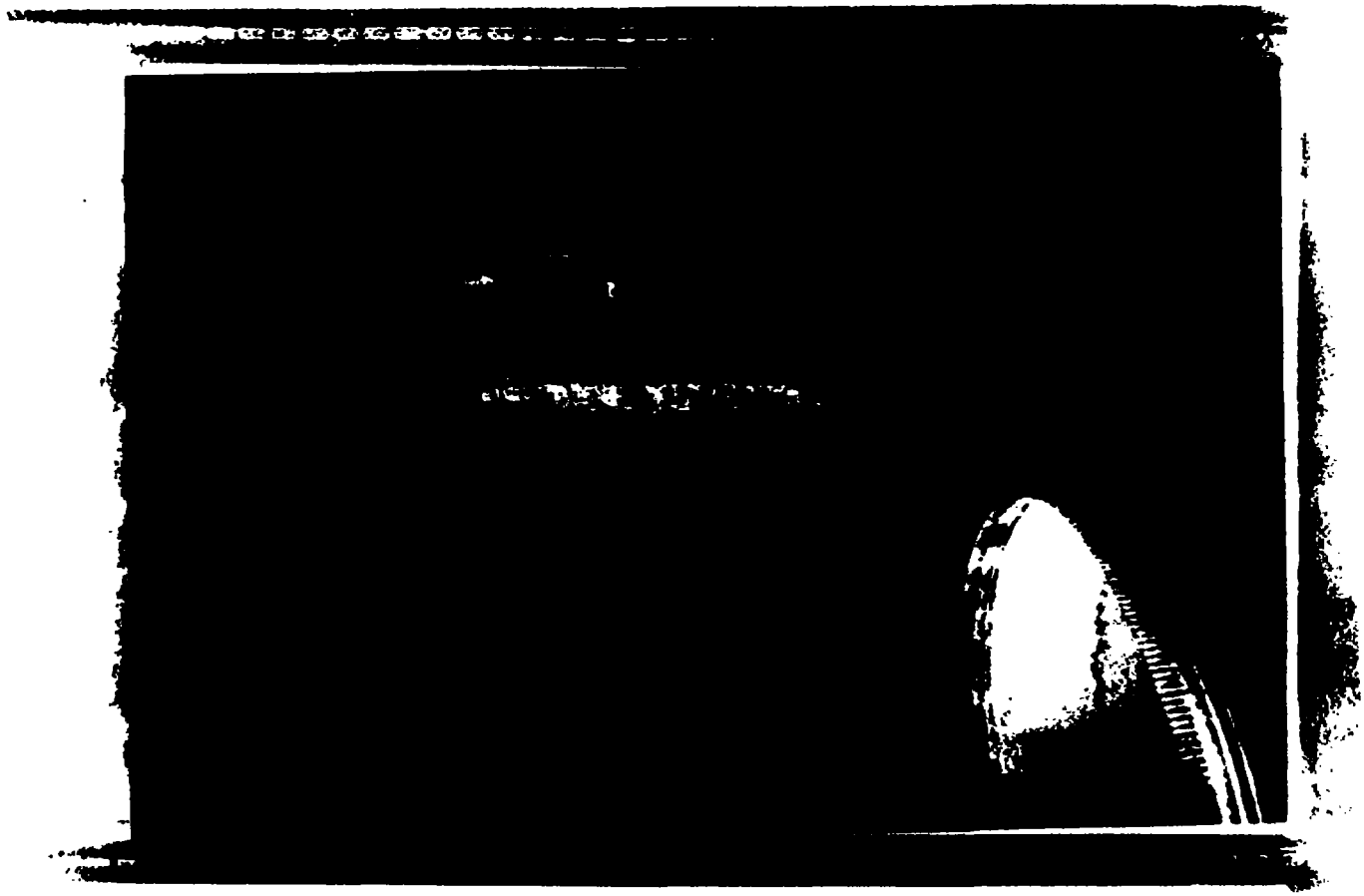
- **High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate:** Total chromium as high as 13,000 mg/kg and total lead up to 3,700 mg/kg were detected in shallow soil samples from the northwest site yard, where these metals are available for off-site migration via wind, runoff, or foot traffic. Downward migration of these contaminants may occur through infiltration of precipitation. Mortar crumbling out of the brickwork on the south-facing exterior wall of Building A was found to contain total chromium at 31,000 mg/kg, TCLP chromium at 1,600 mg/L, and hexavalent chromium at 17,000 mg/kg. As it deteriorates, this chromium-contaminated mortar reaches the sidewalk directly, where it may migrate by any of the means stated above, and infiltrate downward through cracks in the pavement.

- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released:** Total chromium as high as 13,000 mg/kg and total lead up to 3,700 mg/kg were detected in [illegible] soil samples from the northwest [illegible] where these metals are available for off-site migration via wind and runoff. Downward migration of these contaminants may occur through infiltration of precipitation. Deterioration of mortar in the brickwork on the south-facing exterior wall of Building A is augmented by storms and temperature changes. This material was found to contain total chromium at 31,000 mg/kg, TCLP chromium at 1,600 mg/L, and hexavalent chromium at 17,000 mg/kg. As it deteriorates, this chromium-contaminated mortar reaches the sidewalk directly, where it may migrate by wind and runoff, and may infiltrate downward through cracks in the pavement. Possibly an even greater meteoric cause of off-site contaminant migration is a relatively shallow groundwater table that may be expected to rise and fall with the seasons and major storm events. A rising water table might pick up subsurface chromium and chromium compounds that have already migrated downward from plating shop processes in Building A and move them toward the North Branch of the Chicago River, which is located approximately 1,000 feet west of the LE site. This route would pass un[illegible] adrozny property on the way.

Appendix A

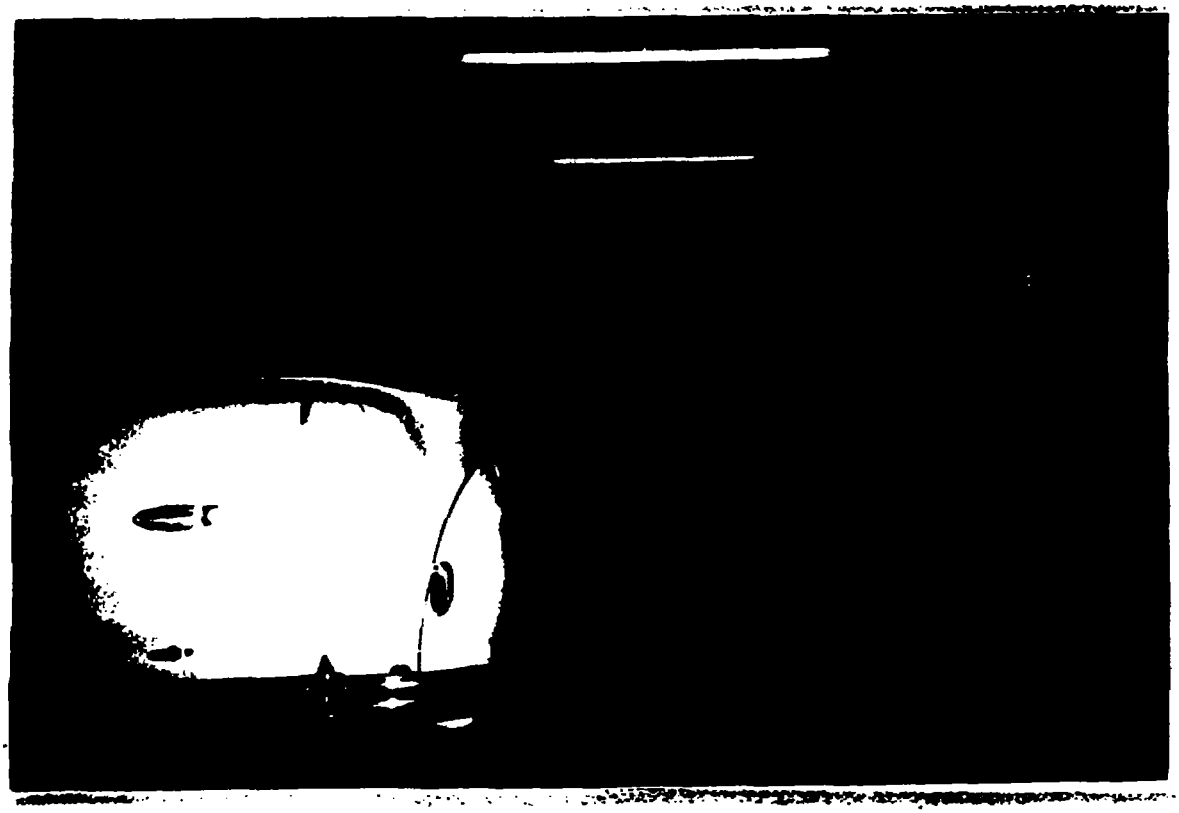
Photodocumentation

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 0924 **Direction:** N
TDD: S05-0006-0117 **Photographer:** L. Lueck
Description: Yellow stain near floor in Building X



Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 0925 **Direction:** NE
TDD: S05-0006-0117 **Photographer:** L. Lueck

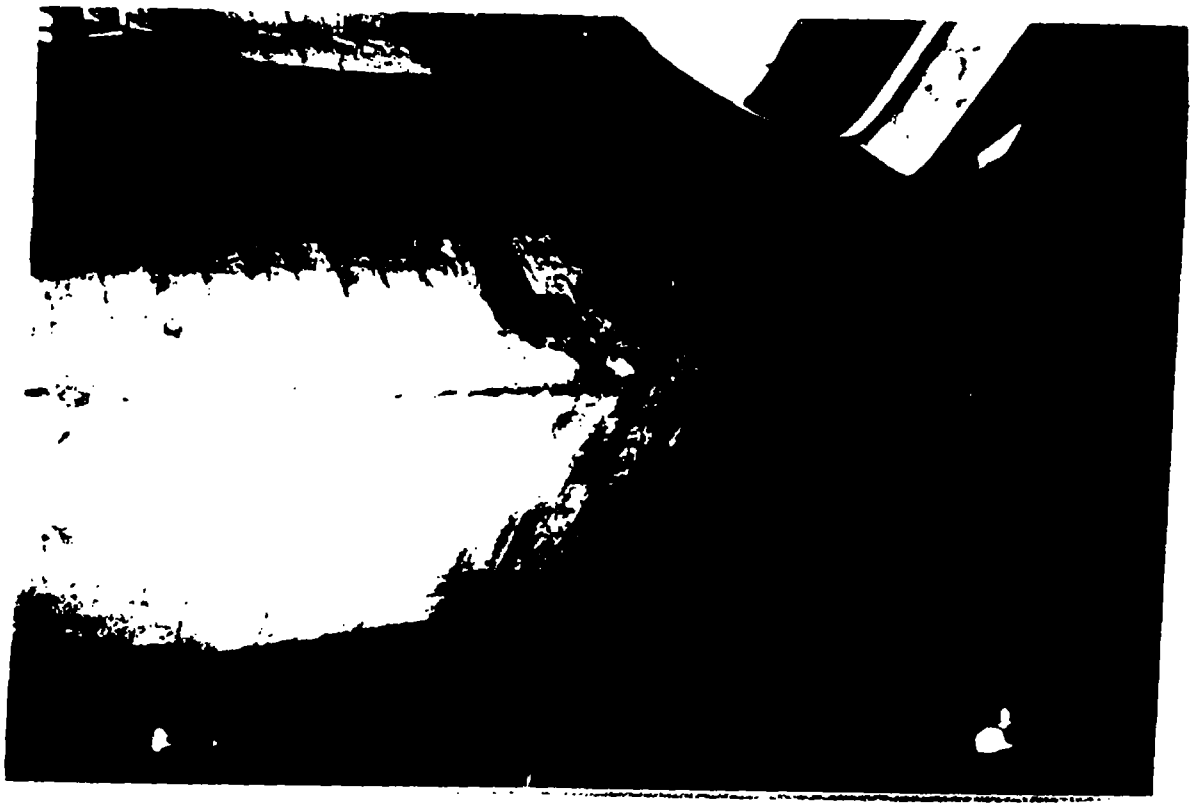
Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 0926 **Direction:** SE
TDD: S05-0006-017 **Photographer:** L. Lueck
Description: Yellow [illegible] Building X



Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 0928 **Direction:** N
TDD: S05-0006-017 **Photographer:** L. Lueck
Description: General view of Building X interior

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 0930 **Direction:** W
TDD: S05-0006-017 **Photographer:** L. Lueck
Description: Broken surficial concrete revealing yellow material underneath, southwest corner of Building A.

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 0932 **Direction:** S
TDD: S05-0006-017 **Photographer:** L. Lueck

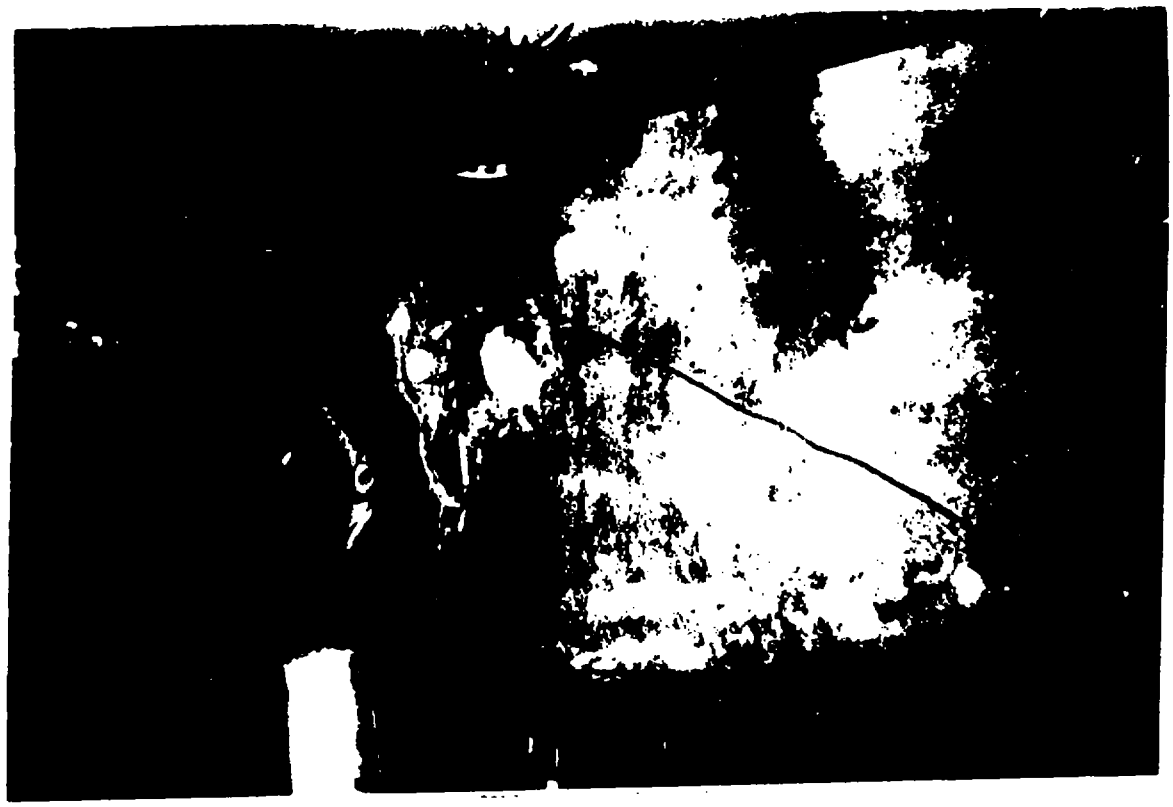


Site: [illegible] Date: [illegible] Time: [illegible] Direction: SE
TDD: [illegible]
Photographer: L. Lueck
Description: [illegible]

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 1008 **Direction:** S
TDD: S05-0006-0107 **Photographer:** L. Lueck
Description: Soil sample [illegible] at base of yellow-stained wall

Site: Former Electrofinishers **Date:** [illegible] **Time:** 1010 **Direction:** N
TDD: S05-0006-017 **Photographer:** L. Lueck
Description: Soil sample location ES2, debris pile in northwest yard

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 1020 **Direction:** SE
TDD: S05-0006-017 **Photographer:** L. Lueck



Site:
FDD:
Description:

Date:
Photographer:

Time:

Direction:

Site: Former Electroplishers
FDD:
Description:

Date: 8/20/00
Photographer:

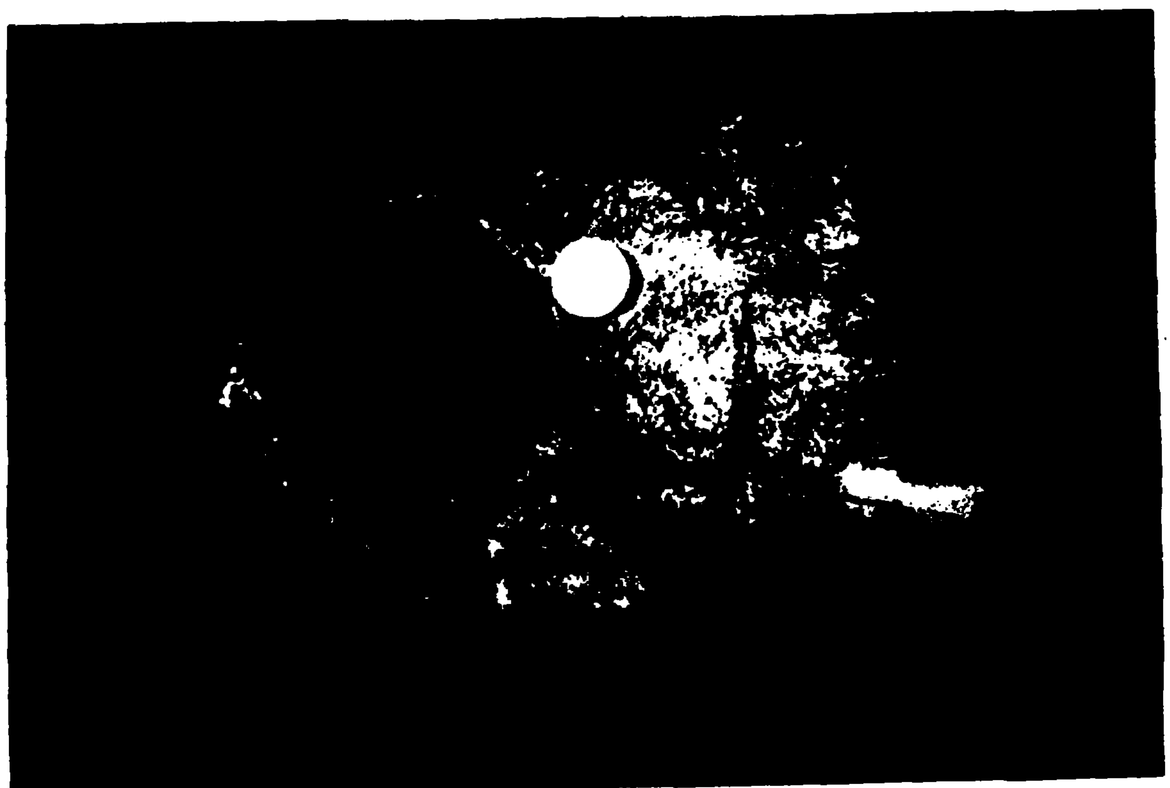
Time: 1040

Direction: NW

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** [illegible] **Direction:** ESE

TDD: S05-0006-017 **Photographer:** L. Lueck

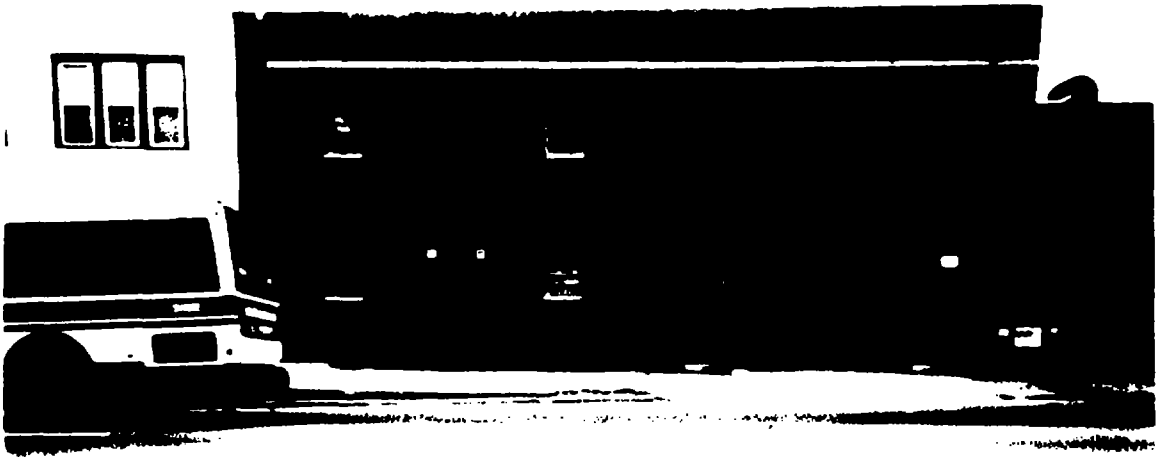
Description: Sample [illegible] taken [illegible] east [illegible] Building A



Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 1100 **Direction:** N

TDD: S05-0006-017 **Photographer:** L. Lueck

Site: [illegible] Date: [illegible] Time: [illegible] Direction: NW
TDD: [illegible] Photographer: [illegible]
Description:



Site: Former Electromashers **Date:** [illegible] **Time:** [illegible] **Direction:** N
TDD: S05 [illegible] **Photographer:** [illegible]
Description: Building [illegible]

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 1148 **Direction:** N NE
TDD: S05-0006-017 **Photographer:** L Lueck
Description: Panorama of three residential buildings (left) and three joined brick site buildings (right)

Site: Former Electrofinishers **Date:** [illegible] **Time:** [illegible] **Direction:** NE
TDD: S05-0006-017 **Photographer:** [illegible]
Description: Building A [illegible] Building B [illegible] office [illegible] center, Building C [illegible] right, dark brick building with overhead door at far right is Building D

Site: Former Electrofinishers **Date:** 8/10/00 **Time:** 1152 **Direction:** N
TDD: S05-0006-017 **Photographer:** [illegible]

Site: [illegible] **Date:** [illegible] **Time:** [illegible] **Direction:** S[illegible]
TDD: [illegible] **Photographer:** [illegible]
Description: [illegible] and seed

Appendix B

Validated Laboratory Reports and Analytical Data Memoranda

ecology and environment, inc.

[illegible]
[illegible]
Tel 312 578-9043 Fax 312 578 9345

DATE: [illegible]

TO: Larry Lueck, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Patrick Wilson, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Resource Conservation and Recovery Act (RCRA) Metals and Toxicity Characteristic Leaching Procedure (TCLP) Chromium and Lead, and Hexavalent Chromium, Former Electrofinishers, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-0006-017 Analytical TDD S05-0006-805
Project PAN 0N1701SIXX Analytical PAN 0NAE01TAXX

The data quality assurance (QA) review of eight solid samples collected from the Former Electrofinishers site is complete. The samples were collected on August 10, 2000, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to CT&E Environmental Services, Inc., Ludington, Michigan. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1311 (TCLP), 6020 (metals), 7471 (mercury), and 7196 (hexavalent chromium).

Sample Identification

START Identification No.	Laboratory Identification No.
FS-1	3003820001
FS-2	3003820002/0009
FS-3	3003820003/0010
FC-1	3003820004/0011
FC-2	3003820005/0012
FC-3	3003820006/0013
FS-4	3003820007/0014
FC-4	3003820008/0015

I. [illegible]

The samples were collected on August [illegible], and analyzed on August [illegible]. Analysis for mercury was performed on August [illegible]. TCLP analyses were performed on August 26 and 31, [illegible]. This is within the [illegible] days for mercury holding time limit. The [illegible] hour time 24 hours for hexavalent chromium was exceeded and all values have been qualified as estimated.

II. Calibration

- Initial [illegible]: Acceptable

Recoveries for the initial calibration verification were within [illegible] to 120% for mercury, as required. The correlation coefficient for mercury exceeded 0.995.

- Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110% 80 to 120% for mercury, as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use with the above-stated qualifications.

Data Qualifiers and Definitions:

J - The associated numerical value is an estimated quantity because the reported concentrations were less than required detection limits or quality control criteria were not met.

ecology and environment, inc.

[illegible]

TO: [illegible] START Project Manager, E & E, Chicago, Illinois

FROM: [illegible] START Analytical Services Manager, E & E, [illegible]

THRU: [illegible] START Assistant Program Manager, [illegible]

SUBJECT: [illegible] Review for Total and Reactive Cyanide, [illegible] Electrofinishers, [illegible], Cook County, Illinois

REFERENCE: Project TDD [illegible] Analytical TDD S05-0006-805
Project PAN [illegible]SIXX Analytical PAN 0NAE01TAXX

The data quality assurance (QA) review of eight solid samples collected from the Former Electrofinishers site is complete. The samples were collected on August 10, 2000, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to [illegible] Environmental Services, Inc., Ludington, Michigan. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods [illegible]14 and 7.3.3.2.

Sample Identification

START Identification No.	Laboratory Identification No.
FS-1	3003820001
FS-2	3003820002
FS-3	3003820003
FC-1	3003820004
FC-2	3003820005
FC-3	3003820006
FS-4	3003820007
FC-4	3003820008

[illegible] and analyzed [illegible] holding time [illegible].

[illegible] were [illegible].

[illegible] No [illegible] in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The [illegible] of the data is based on criteria for "A Laboratory Guide to Participation in the Office of Solid Waste and Emergency Response (OSWER) Directive dated 1 April 1990) Data Validation [illegible] Section IV, Overall Data Validation [illegible] based upon the information provided, [illegible] acceptable for use.

CT&E Environmental Services, Inc.

Sample ID:	[illegible]	Matrix:	[illegible]
Client Sample ID	[illegible]	Location:	
Collected:	[illegible]	Project:	S05-0006-805
Received:	[illegible]	Sampled By:	--

Comments:

Sample received above required temperature range. Results and/or reporting limits may be biased low

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Date / Time Analyzed	Analyst
TOTAL METALS ANALYSIS								
Arsenic	[illegible]		mg/Kg	3.31	SW-846 6020	08/14/00 12:3	08/14/00 21:25	SRO
Barium	190		mg/Kg	1.5	SW-846 6020	08/14/00 12:3	08/14/00 21:25	SRO
Cadmium	[illegible]		mg/Kg	0.15	SW-846 6020	08/14/00 12:3	08/14/00 21:25	SRO
Chromium	6700		mg/Kg	3.1	SW-846 6020	08/14/00 12:3	08/14/00 21:35	SRO
Hexavalent Chromium	42 [illegible]		mg/Kg	10	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
Lead	1400		mg/Kg	1.5	SW-846 6020	08/14/00 12:3	08/14/00 21:25	SRO
Mercury	0.39		mg/Kg	0.026	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
Selenium	2.3		mg/Kg	0.31	SW-846 6020	08/14/00 12:3	08/14/00 21:25	SRO
Silver	74		mg/Kg	0.61	SW-846 6020	08/14/00 12:3	08/14/00 21:25	SRO
GENERAL CHEMISTRY ANALYSIS								
Cyanide	4.7		mg/Kg	0.3	SW-846 9014	08/15/00 13:0	08/15/00 18:56	LRS
Reactive Cyanide	ND		mg/Kg	30	SW-846 7.3.3.2	08/14/00 12:1	08/15/00 19:24	LRS
PHYSICAL PROPERTY ANALYSIS								
Total Solids	78.6		%		SM18 2540G		08/15/00 09:19	SPF

Respectfully submitted.
CT&E Environmental Services, Inc.

Lidya Mirza
Project Manager, Michigan Division

Reported: 9/6/2000

Qualifiers

Certification Numbers: WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result

Sample ID:	[illegible]	**Matrix:**	Solid
Client Sample ID:	FS-2	**Location:**	
Collected:	08/10/2000 [illegible]	**Project:**	805-0006-805
Received:	08/11/2000 14:24	**Sampled By:**	JL

Comments:

Sample received above required temperature range. Results and/or reporting limits may be biased low.

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS								
Arsenic	8.2		mg/Kg	1.50	SW-846 6020	08/14/00 12:3	3/14/00 21:55	SRO
Barium	310		mg/Kg	2.5	SW-846 6020	08/14/00 12:3	08/14/00 21:55	SRO
Cadmium	7.3		mg/Kg	0.25	SW-846 6020	08/14/00 12.3	08/14/00 21:55	SRO
Chromium	5500		mg/Kg	1.0	SW-846 6020	08/14/00 12:3	08/14/00 21:55	SRO
Hexavalent Chromium	4.6		mg/Kg	*	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
Lead	3700		mg/Kg	2.5	SW-846 6020	08/14/00 12:3	08/14/00 21:55	SRO
Mercury	0.42		mg/Kg	0.031	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
Selenium	1.3		mg/Kg	0.50	SW-846 6020	08/14/00 12:3	08/14/00 21:55	SRO
Silver	6.9		mg/Kg	1.0	SW-846 6020	08/14/00 12:3	08/14/00 21:55	SRO
GENERAL CHEMISTRY ANALYSIS								
Cyanide	0.97		mg/Kg	0.3	SW-846 9014	08/15/00 13:0	08/15/00 19.02	LRS
Reactive Cyanide	ND		mg/Kg	40	SW-846 7.3.3.2	08/14/00 12:1	08/15/00 19:25	LRS
PHYSICAL PROPERTY ANALYSIS								
Total Solids	64.5		%		SM18 2540G		08/15/00 09:19	SPE

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Silva
Project Manager, Michigan Division

Reported: 9/6/2000

Qualifiers

Certification Numbers: WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
* Estimated result

…T&E Environmental Services Inc

…mple ID:		Matrix:	Solid
	…2000 …	Location:	
	…2000 …:…	Project:	S05-0006-505
		Sampled By:	--

…required temperature range Results and or reporting limits may be biased low

[illegible]	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
…AL METALS ANALYSIS								
[illegible]	11		mg/Kg	0.39	SW-846 6020	08/14/00 12:3	08/14/00 22:00	SRO
[illegible]	200		mg/Kg	1.9	SW-846 6020	08/14/00 12:3	08/14/00 22:00	SRO
[illegible]	6.4		mg/Kg	0.19	SW-846 6020	08/14/00 12:3	08/14/00 22:00	SRO
[illegible]	13000		mg/Kg	19	SW-846 6020	08/14/00 12:3	08/14/00 23:03	SRO
…ent Chromium	0.83		mg/Kg	0.02	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
[illegible]	1100		mg/Kg	1.9	SW-846 6020	08/14/00 12:3	08/14/00 22:00	SRO
[illegible]	0.47		mg/Kg	0.042	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
[illegible]	1.4		mg/Kg	0.39	SW-846 6020	08/14/00 12:3	08/14/00 22:00	SRO
[illegible]	29		mg/Kg	0.78	SW-846 6020	08/14/00 12:3	08/14/00 22:00	SRO
…NERAL CHEMISTRY ANALYSIS								
…de	1.1		mg/Kg	0.4	SW-846 9014	08/15/00 13:0	08/15/00 19:03	LRS
…ve Cyanide	ND		mg/Kg	50	SW-846 7.3.3.2	08/14/00 12:1	08/15/00 19:26	LRS
…L PROPERTY ANALYSIS								
…lids	48.1		%		SM18 2540G		08/15/00 09:19	SPE

…spectfully submitted,
…&E Environmental Services, Inc.

Lidya Gutierrez[illegible]
… Manager, Michigan Division

Reported: 9/6/2000

Certification Numbers WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

…ot detected
…ank contaminant
…tion
…mated result
…

CT&E Environmental Services Inc

Sample ID:	[illegible]	**Matrix:**	Soil
Client Sample ID:	[illegible]	**Location:**	
Collected:	08/10/2000 10:30	**Project:**	305-0006-005
Received:	08/11/2000 14:24	**Sampled By:**	--

Comments:

Sample received above required temperature range. Results and/or reporting limits may be biased low

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS								
Arsenic	ND		mg/Kg	5.1	SW-846 6020	08/14/00 12:3	08/14/00 22:34	SRO
Barium	190		mg/Kg	26	SW-846 6020	08/14/00 12:3	08/14/00 22:34	SRO
Cadmium	ND		mg/Kg	2.6	SW-846 6020	08/14/00 12:3	08/14/00 22:34	SRO
Chromium	52000		mg/Kg	10	SW-846 6020	08/14/00 12:3	08/14/00 22:34	SRO
Hexavalent Chromium	37000		mg/Kg	500	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
Lead	360		mg/Kg	26	SW-846 6020	08/14/00 12:3	08/14/00 22:34	SRO
Mercury	0.033		mg/Kg	0.020	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
Selenium	ND		mg/Kg	5.1	SW-846 6020	08/14/00 12:3	08/14/00 22:34	SRO
Silver	ND		mg/Kg	10	SW-846 6020	08/14/00 12:3	08/14/00 22:34	SRO
GENERAL CHEMISTRY ANALYSIS								
Cyanide	0.30		mg/Kg	0.2	SW-846 9014	08/15/00 13:0	08/15/00 19:04	LRS
Reactive Cyanide	ND		mg/Kg	30	SW-846 7.3.3.2	08/15/00 12:1	08/15/00 19:27	LRS
PHYSICAL PROPERTY ANALYSIS								
Total Solids	96.4		%		SM18 2540G		08/15/00 09:19	SPE

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Wilson

Project Manager, Michigan Division

Reported: 9/6/2000

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND	Not detected
B	Blank contaminant
D	Dilution
J	Estimated result

CT&E Environmental Services Inc

Sample ID:	[illegible]	**Matrix**	Solid
Client Sample ID:	EC-2	**Location.**	
Collected:	08/10/2000 10:40	**Project:**	305-0006-805
Received:	08/11/2000 [illegible]	**Sampled By:**	[illegible]

Comments:

Sample received above required temperature range. Results and or reporting limits may be biased low.

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Date / Time Analyzed	Analyst
TOTAL METALS ANALYSIS								
Arsenic	18		mg/Kg	0.34	SW-846 6020	08/14/00 12:3	08/14/00 22:39	SRO
Barium	38		mg/Kg	1.7	SW-846 6020	08/14/00 12:3	08/14/00 22:39	SRO
Cadmium	2.6		mg/Kg	0.17	SW-846 6020	08/14/00 12:3	08/14/00 22:39	SRO
Chromium	7100		mg/Kg	0.68	SW-846 6020	08/14/00 12:3	08/14/00 22:39	SRO
Hexavalent Chromium	4700		mg/Kg	100	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
Lead	130		mg/Kg	1.7	SW-846 6020	08/14/00 12:3	08/14/00 22:39	SRO
Mercury	0.074		mg/Kg	0.025	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
Selenium	1.9		mg/Kg	0.34	SW-846 6020	08/14/00 12:3	08/14/00 22:39	SRO
Silver	14		mg/Kg	0.68	SW-846 6020	08/14/00 12:3	08/14/00 22:39	SRO
GENERAL CHEMISTRY ANALYSIS								
Cyanide	2.3		mg/Kg	0.3	SW-846 9014	08/15/00 13:0	08/15/00 19.04	LRS
Reactive Cyanide	ND		mg/Kg	30	SW-846 7.3.3.2	08/15/00 12:1	08/15/00 19:30	LRS
PHYSICAL PROPERTY ANALYSIS								
Total Solids	77.4		%		SM18 2540G		08/15/00 09:19	SPE

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Gilmore
Project Manager, Michigan Division

Reported: 9/6/2000

Qualifiers

Certification Numbers: WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

ND	Not detected
B	Blank contaminant
D	Dilution
J	Estimated result

CT&E Environmental Services Inc

Page 6 of 15

Sample ID:	[illegible]	**Matrix:**	Solid
Client Sample ID:	[illegible]	**Location:**	
Collected:	08/10/2000 10:45	**Project:**	805-0006-805
Received:	08/11/2000 14:24	**Sampled By:**	--

Comments:

Sample received above required temperature range. Results and/or reporting limits may be biased low

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
TOTAL METALS ANALYSIS								
Arsenic	[illegible]		mg/Kg	0.30	SW-846 6020	08/14/00 12:3	08/14/00 22:44	SRO
Barium	50		mg/Kg	1.5	SW-846 6020	08/14/00 12:3	08/14/00 22:44	SRO
Cadmium	0.33		mg/Kg	0.15	SW-846 6020	08/14/00 12:3	08/14/00 22:44	SRO
Chromium	4800		mg/Kg	1.61	SW-846 6020	08/14/00 12:3	08/14/00 22:44	SRO
Hexavalent Chromium	2900		mg/Kg	100	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
Lead	40		mg/Kg	1.5	SW-846 6020	08/14/00 12:3	08/14/00 22:44	SRO
Mercury	0.054		mg/Kg	0.021	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
Selenium	1.2		mg/Kg	0.30	SW-846 6020	08/14/00 12:3	08/14/00 22:44	SRO
Silver	ND		mg/Kg	0.61	SW-846 6020	08/14/00 12:3	08/14/00 22:44	SRO
GENERAL CHEMISTRY ANALYSIS								
Cyanide	0.48		mg/Kg	0.2	SW-846 9014	08/15/00 13:0	08/15/00 19:12	LRS
Reactive Cyanide	ND		mg/Kg	30	SW-846 7.3.3.2	08/15/00 12:1	08/15/00 19:31	LRS
PHYSICAL PROPERTY ANALYSIS								
Total Solids	94.1		%		SM18 2540G		08/15/00 09:19	SPE

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Pshiza

Project Manager, Michigan Division

Reported: *9/6/2000*

Qualifiers

Certification Numbers: WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

ND	Not detected
B	Blank contaminant
D	Dilution
J	Estimated result

000011

[illegible] Environmental Services

[illegible]

[illegible]	[illegible]	Matrix	Solid
Sample ID	ES-4	Location:	
[illegible]	[illegible]	Project:	305-0006-805
[illegible]	[illegible]	Sampled By:	--

[illegible]

[illegible] the required temperature range. Results and or reporting limits may be biased low

[illegible]	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
[illegible] METALS ANALYSIS								
[illegible]	[illegible]		[illegible]	6.2	SW-846 6020	08/14/00 12:3	08/14/00 22:49	SRO
[illegible]	500 [illegible]		[illegible]	31	SW-846 6020	08/14/00 12:3	08/14/00 22:49	SRO
[illegible]	38 [illegible]		[illegible]	3.1	SW-846 6020	08/14/00 12:3	08/14/00 22:49	SRO
[illegible]	29000		[illegible]	12	SW-846 6020	08/14/00 12:3	08/14/00 22:49	SRO
[illegible] Chromium	2200		mg/kg	100	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
[illegible]	4900		mg/kg	31	SW-846 6020	08/14/00 12:3	08/14/00 22:49	SRO
[illegible]	3.1 [illegible]		mg/kg	1.1	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
[illegible]	ND [illegible]		mg/Kg	6.2	SW-846 6020	08/14/00 12:3	08/14/00 22:49	SRO
[illegible]	ND [illegible]		mg/Kg	12	SW-846 6020	08/14/00 12:3	08/14/00 22:49	SRO
GENERAL CHEMISTRY ANALYSIS								
[illegible]ide	7.9		mg/Kg	0.2	SW-846 9014	08/15/00 13:0	08/15/00 19:12	LRS
[illegible]ve Cyanide	ND		mg/Kg	30	SW-846 7.3.3.2	08/15/00 12:1	08/15/00 19:32	LRS
PHYSICAL PROPERTY ANALYSIS								
[illegible] Solids	89.5		%		SM18 2540G		08/15/00 09:19	SPF

Respectfully submitted,
S.E. Environmental Services, Inc.

[illegible]
Project Manager, Michigan Division

Reported: 9/6/2000

Certification Numbers: WI #999959190, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

[illegible] Not detected
Blank contaminant
[illegible]
[illegible]mated result

CT&E Environmental Services Inc

Sample ID:	[illegible]	**Matrix:**	Solid
Client Sample ID:	[illegible]	**Location:**	
Collected:	08/10/2000 11:45	**Project:**	305-0006-805
Received:	08/11/2000 14:24	**Sampled By:**	[illegible]

Comments:

Sample received above required temperature range. Results and/or reporting limits may be biased low

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Date / Time Analyzed	Analyst
TOTAL METALS ANALYSIS								
Arsenic	ND		mg/Kg	4.2	SW-846 6020	08/14/00 12:3	08/14/00 22:54	SRO
Barium	33		mg/Kg	21	SW-846 6020	08/14/00 12:3	08/14/00 22:54	SRO
Cadmium	ND		mg/Kg	2.1	SW-846 6020	08/14/00 12:3	08/14/00 22:54	SRO
Chromium	31000		mg/Kg	8.5	SW-846 6020	08/14/00 12:3	08/14/00 22:54	SRO
Hexavalent Chromium	17000		mg/Kg	500	SW-846 7196	08/14/00 07:1	08/15/00 14:47	SKP
Lead	84		mg/Kg	21	SW-846 6020	08/14/00 12.3	08/14/00 22:54	SRO
Mercury	0.025		mg/Kg	0.020	SW-846 7471	08/15/00 17:3	08/15/00 09:07	JL
Selenium	ND		mg/Kg	4.2	SW-846 6020	08/14/00 12:3	08/14/00 22:54	SRO
Silver	ND		mg/Kg	8.5	SW-846 6020	08/14/00 12:3	08/14/00 22:54	SRO
GENERAL CHEMISTRY ANALYSIS								
Cyanide	1.3		mg/Kg	0.2	SW-846 9014	08/15/00 13:0	08/15/00 19:13	LRS
Reactive Cyanide	ND		mg/Kg	30	SW-846 7.3.3.2	08/15/00 12:1	08/15/00 19:33	LRS
PHYSICAL PROPERTY ANALYSIS								
Total Solids	99.4		%		SM18 2540G		08/15/00 09:19	SPE

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Silviza

Project Manager, Michigan Division

Reported: 9/6/2000

Qualifiers

Certification Numbers: WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

ND	Not detected
B	Blank contaminant
D	Dilution
J	Estimated result

CT&E Environmental Services [illegible]

Sample ID:	[illegible]	Matrix:	[illegible]
Client Sample ID:	FS-2 TCLP	Location:	
Collected:	08/[illegible]/2000 [illegible]	Project:	S05-0006-805
Received:	08/22/2000 [illegible]	Sampled By:	

Comments:

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
TCLP METAL ANALYSIS SW-846 Method 1311								
Ch[illegible]ium	0 2	5	mg/L	0 020	SW-846 6020 TCLP	08/24/00 [illegible]	08/26/00 04 34	[illegible]
Lead	[illegible]	5	mg/L	0 020	SW-846 6020 TCLP	08/24/00 15 5	08/26/00 04 34	SRO

Respectfully submitted,
CT&E Environmental Services, Inc.

Project Manager, Michigan Division

Reported: 9/6/2000

Qualifiers

Certification Numbers WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result
M Matrix interference

000014

CT&E Environmental Services Inc.

Page 1 of 5

Sample ID:	0003820010	**Matrix:**	Solid
Client Sample ID:	FS-3 TCLP	**Location:**	
Collected:	08/10/2000 10:10	**Project:**	505-0006-605
Received:	08/22/2000 17:21	**Sampled By:**	

Comments:

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
TCLP METAL ANALYSIS SW-846 Method 1311								
Chromium	1.2	5	mg/L	0.020	SW-846 6020 TCLP	08/24/00 15:5	08/26/00 02:14	KAA
Lead	0.19	5	mg/L	0.020	SW-846 6020 TCLP	08/24/00 15:5	08/26/00 02:14	KAA

Respectfully submitted,
CT&E Environmental Services, Inc.

Lidya Pulizia
Project Manager, Michigan Division

Reported: 9/6/2000

Qualifiers

Certification Numbers: WI #999959180; MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result

T&E Environmental Services, Inc.

ID	[illegible]	Matrix:	Solid
Sample ID	[illegible]	Location:	
[illegible]	[illegible]	Project:	S05-0006-605
[illegible]	[illegible]	Sampled By:	

Comments

Parameter	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date - Time Prepared	Analyzed	Analyst
TCLP METAL ANALYSIS SW-846 Method 1311								
[illegible]	2000	5	mg/L	[illegible]	SW-846 6020 TCLP	08/24/00 15:5	08/26/00 04:47	[illegible]

Respectfully submitted,
T&E Environmental Services, Inc.

Project Manager, Michigan Division

Reported: 9/6/2000

Certification Numbers WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

Notes
ND Not detected
Blank contaminant
Dilution
Estimated result

000016

CT&E Environmental Services Inc

Sample ID:	3003820012	**Matrix:**	Solid
Client Sample ID:	FC-2 TCLP	**Location:**	
Collected:	08/10.2000 10:40	**Project:**	S05-0006-805
Received:	08.22.2000 17:24	**Sampled By:**	

Comments:

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
TCLP METAL ANALYSIS SW-846 Method 1311								
Chromium	360	5	mg/L	0.020	SW-846 6020 TCLP	08/24/00 15:5	08/26/00 04:51	SRO

Respectfully submitted,
CT&E Environmental Services, Inc.

Project Manager, Michigan Division

Reported: *9/6/2000*

Qualifiers

- **ND** Not detected
- **B** Blank contaminant
- **D** Dilution
- **J** Estimated result

Certification Numbers WI #999959180, MI #0021; AK UST #048; ND R-081; MD #266; IN C-MI-01

CT&E Environmental Services, Inc.

Sample ID:	[illegible]	**Matrix:**	Solid
Client Sample ID:	FC-3 TCLP	**Location:**	
Collected:	8/10/2000 10:45	**Project:**	S05-0006-805
Received:	8/22/2000 [illegible]	**Sampled By:**	

Comments:

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Analyzed	Analyst
TCLP METAL ANALYSIS SW-846 Method 1311								
Chromium	180		mg/L	020	SW-846 6020 TCLP	08/24/00 15:5	08/30/00 06:00	K [illegible]
Lead	0.067	5	mg/L	020	SW-846 6020 TCLP	08/24/00 15:5	08/30/00 06:00	K [illegible]

Respectfully submitted,
CT&E Environmental Services, Inc.

Ledya Pavlova

Project Manager, Michigan Division

Reported: *9/6/2000*

Qualifiers

Certification Numbers: WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

ND Not detected
B Blank contaminant
D Dilution
J Estimated result

CT&E Environmental Services Inc

Page [illegible]

Sample ID:	[illegible]	**Matrix:**	Solid
Client Sample ID:	FS-4 TCLP	**Location:**	
Collected:	08/10 2000 [illegible]	**Project:**	305-0006-005
Received:	08 22 2000 [illegible]	**Sampled By:**	

Comments:

Test Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date / Time Prepared	Date / Time Analyzed	Analyst
TCLP METAL ANALYSIS SW-846 Method 1311								
Chromium	120	5	mg/L	0.020	SW-846 6020 TCLP	08/24/00 15:5	08/26/00 06:54	SRC
Lead	ND	5	mg/L	0.020	SW-846 6020 TCLP	08/24/00 15:5	08/26/00 06:54	SRC

Respectfully submitted,
CT&E Environmental Services, Inc.

Lediya Gilliam

Project Manager, Michigan Division

Reported: *9/6/2000*

Qualifiers

ND Not detected
B Blank contaminant
D Dilution
J Estimated result

Certification Numbers: WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

000013

[illegible]&E Environmental Services Inc.

[illegible]ID	[illegible]	Matrix	Solid
Sample ID	[illegible]TCLP	Location:	
[illegible]	[illegible]45	Project:	305-0006-805
[illegible]	[illegible]	Sampled By:	

Description	Result	Allowable Limit	Unit	Reporting Detection Limit	Method	Date/Time Prepared	Analyzed	Analyst
TCLP METAL ANALYSIS SW-846 Method 1311								
[illegible]	1600	[illegible]	mg/L	0.020	SW-846 6020 TCLP	08/24/00 15:5	08/26/00 07:02	SRO

[illegible]tically submitted,
[illegible]E Environmental Services, Inc.

[illegible] Manager, Michigan Division

Reported: *9/6/2000*

Certification Numbers WI #999959180, MI #0021, AK UST #048, ND R-081, MD #266, IN C-MI-01

[illegible]detected
[illegible]ank contaminant
[illegible]ution
[illegible]mated result
[illegible] interference

000020